

also spring upon the shoulders of the quarry from a side and bear it down by its own weight, breaking the neck of its victim during this onslaught. Though preying practically on the same kind of animals as the tiger—the deer tribe and pig in forests, and cattle, sheep and goats near human habitations—the panther, in keeping with its smaller size, attacks animals of the smaller variety leaving the full sized ones generally to the tiger. The panther also takes to eating small animals like the porcupine, hares and even the smaller rodents, and village panthers often lift poultry. A panther returning to its kill is often extremely cautious, but in this respect the animal which inhabits forest regions is different from the village panther, which has come in contact with human beings. The former approaches the kill boldly, and does so even after being once shot at, provided, of course, that it is unhurt. So, too, does a forest tiger inexperienced in the ways of man. A panther which dwells in the vicinity of human habitations, on the other hand, is the 'personification of cautiousness'. He approaches the kill slowly and deliberately, watching the surroundings of the kill every instant and frequently surveying carefully the trees around it. Anything causing the least suspicion will make it give off a 'whoof' of surprise and abandon its meal rather than take the smallest risk.

A pack of wild dogs is more than a match for a solitary panther, however powerful and experienced the animal may be, and I have witnessed three or four instances in which a panther has been deprived of its legitimate prey and routed from its hard-earned kill or even massacred by the combined onslaught of wild dogs.

Though not exhibiting the magnificent lines of a full grown tiger a panther has perfected its symmetry of form, grace and agility, and it has been considered the 'embodiment of the ideal of a beast of prey'.

The average size of a full grown male panther, in Mysore State, is between $6\frac{1}{2}$ and 7 ft., a forest panther being generally better built and larger in size than its village counterpart. Dunbar Brander gives the average size of a forest panther as 7 ft. 5 in. Burke has recorded a panther 8 ft. $5\frac{1}{2}$ in. in length stated to have been shot at Bandipur in Mysore district by A. G. Arbuthnot, one of 7 ft. 10 in. shot by R. R. Lewis at Bellary, and another of 7 ft. 3 in. shot by H. Norman in the Nilgiris. But, to-day, a panther of about $6\frac{1}{2}$ ft. in length may be considered a good average for Mysore State.

DEHRA DUN, U.P.
November, 1952.

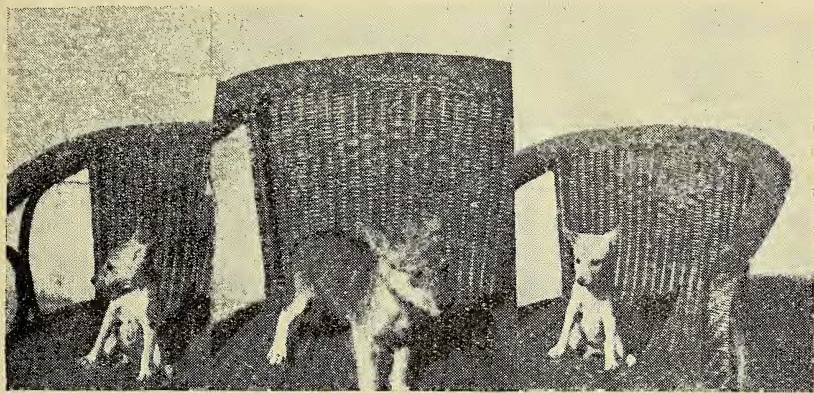
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3. A CROSS BETWEEN THE DOMESTIC DOG (*CANIS FAMILIARIS*) AND THE FOX (*VULPES BENGALENSIS*)

(With a photo)

Crosses between domestic or wild dogs and wolf or jackal, or fox, are commonly reported, more frequently between jackals and dogs. Hybrids between jackals and wild or domestic dogs are reported earlier

in this *Journal* by Mr. C. H. Donald and Lt.-Col. Burton, etc. Sportsmen have often noticed dog-like jackals, later identified to be hybrid dog-jackals. Blanford once expressed the opinion that the



5-week-old dog-fox hybrids

common Indian pie-dog may be in part descended from wolf or more likely from jackal, and the editors of this journal added that the jackal-like appearance of many pariah dogs seemed to indicate that cross breeding takes place between dogs and jackals.

The accompanying photo shows five-week old hybrid dog-foxes. A vixen which has been kept as a pet from the size of a rat by Prof. J. P. Joshua, was found to be friendly with his dog, whose mother is a pedigree Alsatian and father a Bull-terrier, and he himself has a Dalmatian fur. They were successfully mated and three young ones were brought forth on the morning of the 14th of February, 1953. Two of them are males and the other a female.

For all practical purposes they look like dogs, but they resemble the mother vixen in two respects. Firstly, in preferring darkness and avoiding bright light, and in being active at night, rather than during the day, and secondly, in attempting to howl occasionally when they are in distress. Unlike the dog, the young ones have a bushy tail which is not curved. Donald has reported a set of hybrid jackal-dogs to have the innate fear for man, which is not observed in these pups, but they are extremely playful with their master just like their mother.

It is common for the members of Canidae, especially dogs and jackals, to regurgitate food for the benefit of young ones up to six weeks. Such regurgitation was noticed in this case only after the sixth week, apparently when the mother felt that the young ones were not properly suckled.

Whether the offspring will be sterile or fertile when interbred, or when crossed with the dog or the fox, is yet to be seen. Such interbreeding between jackals and dogs is probably of natural occur-

rence in the outskirts of jungle villages, but fertile crosses between foxes and dogs are comparatively rare.

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May 20, 1953.

4. WILD BUFFALOES AND TAME

I refer to your quotation from Captain Baldwin's 'The Large and Small Game of Bengal', given in the Miscellaneous Notes of Volume 51 (1) at the conclusion of Mr. R. P. Noronha's account on the above subject.

I have had occasion during the last three years to make fairly extensive enquiries in this connection in and around the sanctuaries and forest areas of Assam, and in certain respects my findings disagree with those of Captain Baldwin. I found, for instance, that the Assamese and the Nepalese herdsmen of Assam have a very marked dislike for wild bulls associating with domestic herds for the following reasons:—

(a) As soon as a wild bull starts associating with a domestic herd he immediately kills the domestic bulls, which prevents the herd being kept up as explained in (b) below.

(b) As a result of wild bulls mating with domestic cows, approximately 90% of the calves are still-born. Why this is so I have been unable to ascertain and you may be in a position to throw more light on the subject, but I should like to quote J. W. Best who says in his 'Shikar Notes': 'Wild bulls frequently take over the mastery of a domestic herd, and although they mate with them, the calves are said to be still-born and the cows die at their birth'. Best was talking about wild buffalo in Madhya Pradesh and I found his remark equally true about Assam, although my enquiries did fail to corroborate that the cows also usually die.

(c) As stated by Captain Baldwin, such wild bulls often lose their fear of man and sometimes even become killers, not hesitating to attack on sight any human being who tries to approach the herd they have taken possession of. This feature, besides being fraught with grave danger for the herdsmen, makes it almost impossible for the domestic cows to be milked and picketed. A noteworthy point in this connection is that it is usually a young bull, driven out of a wild herd by a stronger bull, who begins to take an active interest in domestic cows, but occasionally one also comes across an old animal taking a similar but more casual interest after having been ousted from a wild herd by a strong 'up-and-coming' young bull.

In conclusion I should also like to state that I had opportunities to see a few mature cows who were the product of wild bulls mating